Yanhong Zeng

+8613146281900 | zengyh1900@gmail.com | zengyh1900.github.io | Yanhong Zeng

Biography

Yanhong Zeng is currently a researcher at Shanghai AI Laboratory. Before that, she obtained her computer science Ph.D. degree in the joint doctoral program between Sun Yat-sen University and Microsoft Research Asia (MSRA) in 2022, supervised by Prof. Hongyang Chao and Dr. Baining Guo.

Her research interests is generative AI (AIGC), specifically in controllable multimodal (e.g., text, pixels, audio) generation and image/video editing. She has published tens of papers in top international conferences and journals, such as CVPR/ECCV/NeurIPS/TVCG. She has reviewed more than 60 papers from top conferences and journals, including CVPR/ICCV/NeurIPS/ICLR/ICML/TVCG, etc.

Education

Sun Yat-sen University, PhD in Computer Science and Technology Aug. 2017 – Jun. 2022

- Recipient of the National Scholarship Award
- Thesis topic: Research on Image and Video Inpainting by Generative Adversarial Networks

Sun Yat-sen University, BS in Software Engineering Aug. 2013 – Jun. 2017

- GPA: 3.9/4.0
- Recipient of the National Scholarship Award, Outstanding Undergraduate Award

Experience

Researcher, Shanghai AI Laboratory – Shanghai, China June 2022 – present

- **Poems of Timeless Acclaim (R&D).** It is an AI-generated animation series created in collaboration with the China Media Group (CCTV). Broadcast in over 10 languages and on more than 70 mainstream media platforms overseas, it has reached an audience of nearly 100 million worldwide viewers within two weeks. I am responsible for developing the workflow for controllable image generation and human-centric animation.
- **MagicMaker (Project Owner).** MagicMaker is an AI platform that enables seamless image generation, editing, and animation. I am responsible for initiating the project, setting the roadmap, deciding on the overall design and framework of the UI/UX, and leading a small team of R&D to develop the models deployed on the platform.
- **MMagic (Lead Core Maintainer).** MMagic is an open-source image and video editing/generating toolbox based on PyTorch. I am responsible for the overall design of the 2.0 refactoring plan, specifying the release schedule, feature development, code review, and participating in community activities.

Research Intern, Microsoft Research Asia – Beijing, China Aug. 2018 – Dec. 2021

- Mentored by Dr. Jianlong Fu, conducting cutting-edge research on Generative Adversarial Network and its applications on image and video inpainting, and video super-resolution.
- Deliver image inpainting models for automatic logo removal to Microsoft Office Team.

Research Intern, Microsoft Research Asia – Beijing, China June 2016 – June 2017

- Mentored by Dr. Richard Cai, conducting cutting-edge research in 3D human body reshaping.

Professional Services

- **Outstanding Reviewer** of ICML 2022.
- **Conference Reviewer** of CVPR, ICCV, ECCV, SIGGRAPH, NeurIPS, ICML, ICLR, AAAI.
- **Journal Reviewer** of TVCG, TIP, TMM, TCSVT, PR.

Selected Publications

* denotes equal contribution, † denotes the corresponding author. Please check the full list from Google Scholar.

Live2Diff: Live Stream Translation via Uni-directional Attention in Video Diffusion Models Arxiv 2024
Zhening Xing, Gereon Fox, **Yanhong Zeng**, Xingang Pan, Mohamed Elgharib, Christian Theobalt, Kai Chen

FoleyCrafter: Bring Silent Videos to Life with Lifelike and Synchronized Sounds Arxiv 2024
Yiming Zhang, Yicheng Gu, †**Yanhong Zeng**, Zhening Xing, Yuancheng Wang, Zhizheng Wu, †Kai Chen

StyleShot: A Snapshot on Any Style Arxiv 2024
Junyao Gao, Yanchen Liu, Yanan Sun, Yinhao Tang, **Yanhong Zeng**, Kai Chen, Cairong Zhao

A task is worth one word: Learning with task prompts for high-quality versatile image inpainting ECCV 2024
Junhao Zhuang, **Yanhong Zeng**, Wenran Liu, Chun Yuan, Kai Chen

Make-It-Vivid: Dressing Your Animatable Biped Cartoon Characters from Text CVPR 2024
Junshu Tang, **Yanhong Zeng**, Ke Fan, Xuheng Wang, Bo Dai, Kai Chen, Lizhuang Ma

Pia: Your personalized image animator via plug-and-play modules in text-to-image models CVPR 2024
Yiming Zhang, Zhening Xing, †**Yanhong Zeng**, Youqing Fang, †Kai Chen

Aggregated Contextual Transformations for High-Resolution Image Inpainting TVCG 2023
Yanhong Zeng, Jianlong Fu, Hongyang Chao, Baining Guo

Advancing High-Resolution Video-Language Representation with Large-Scale Video Transcriptions CVPR 2022
*__Yanhong Zeng__, *Hongwei Xue, *Tiankai Hang, *Yuchong Sun, Bei Liu, Huan Yang, Jianlong Fu, Baining Guo

Improving Visual Quality of Image Synthesis by A Token-based Generator with Transformers NeurIPS 2021
Yanhong Zeng, Huan Yang, Hongyang Chao, Jianbo Wang, Jianlong Fu

Learning semantic-aware normalization for generative adversarial networks NeurIPS 2020 (Spotlight)
Heliang Zheng, Jianlong Fu, **Yanhong Zeng**, Jiebo Luo, Zhengjun Zha

Learning joint spatial-temporal transformations for video inpainting ECCV 2020
Yanhong Zeng, Jianlong Fu, Hongyang Chao

Learning pyramid-context encoder network for high-quality image inpainting CVPR 2019
Yanhong Zeng, Jianlong Fu, Hongyang Chao, Baining Guo

3D human body reshaping with anthropometric modeling ICIMCS 2017 (Oral)
Yanhong Zeng, Jianlong Fu, Hongyang Chao